DOCUMENT RESUME

ED 103 661 CE 003 265

AUTHOR Kalleberg, Arne L.; Sorensen, Aage B.
TITLE The Matching of Men to Jobs: Mechanisms and Consequences for Organizations and Individuals. Discussion Papers No. 212-74.
INSTITUTION Wisconsin Univ., Madison. Inst. for Research on Poverty.
REPORT NO IRP-DP-212-74
PUB DATE Aug 74
NOTE 38p.; Paper presented at the Annual Meeting of the American Sociological Association (Montreal, Quebec, August 1974)

EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE
DESCRIPTORS Adjustment (to Environment); Economic Factors; *Individual Needs; Job Analysis; Job Placement; *Jobs; *Job Satisfaction; Labor Market; Literature Reviews; Manpower Needs; *Occupational Aspiration; Organizational Climate; Vocational Adjustment; Work Attitudes

ABSTRACT

In an industrial society, jobs and men can be conceived of as separate entities that are brought together through a matching process. In this paper the "goodness-of-fit" between the individual and the job is taken as problematic and is used as an explanatory concept for both the reactions of individuals to their jobs (job satisfaction, stress, turnover) and for the response of the organization to characteristics of its members (conflict, need for control and communication). It is argued that the distribution of jobs according to characteristics sought out by individuals in the matching process (such as status, income, autonomy) is determined quite independently from the forces that determine the supply of individuals according to the value they place on various characteristics of jobs and the skills they possess. In the matching process the outcome is determined by the relative bargaining power of individuals and organizations and the distribution of information about jobs and men. The psychological impact of discrepancies between jobs and men on individuals is analyzed as well as the reaction of organizations to various types of discrepancies. (Author)

ED003263

212-74

INSTITUTE FOR RESEARCH ON POVERTY DISCUSSION PAPERS

THE MATCHING OF MEN TO JOBS: MECHANISMS AND CONSEQUENCES FOR ORGANIZATIONS AND INDIVIDUALS

Arne L. Kalleberg and Aage B. Sørensen

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

UNIVERSITY OF WISCONSIN - MADISON

THE MATCHING OF MEN TO JOBS:

MECHANISMS AND CONSEQUENCES FOR ORGANIZATIONS AND INDIVIDUALS

by

Arne L. Kalleberg and Aage B. Sørensen

University of Wisconsin-Madison

August 1974

Paper presented at the meetings of the American Sociological Association, Montreal, August 27, 1974. The research reported here was supported partially by funds granted to the Institute for Research on Poverty pursuant to the provisions of the Economic Opportunity Act of 1969. In addition, Arne Kalleberg was supported by Grant GMO-1526 from the National Institute of General Medical Sciences. The authors wish to thank Michael Aiken for helpful comments on an earlier draft of this paper. The conclusions are the sole responsibility of the authors.

Abstract

In an industrial society, jobs and men can be conceived of as separate entities that are brought together through a matching process. In this paper the "goodness-of-fit" between the individual and the job is taken as problematic and is used as an explanatory concept for both the reactions of individuals to their jobs (job satisfaction, stress, turnover) and for the response of the organization to characteristics of its members (conflict, need for control and communication). It is argued that the distribution of jobs according to characteristics sought out by individuals in the matching process (such as status, income, autonomy) is determined quite independently from the forces that determine the supply of individuals according to the value they place on various characteristics of jobs and the skills they possess. In the matching process the outcome is determined by the relative bargaining power of individuals and organizations and the distribution of information about jobs and men. The psychological impact of discrepancies between jobs and men on individuals is analyzed as well as the reaction of organizations to various types of discrepancies.

Introduction

In industrial society, the matching of individuals to jobs is a complex and problematic process. Unlike preindustrial societies, where job and man are often tied together from birth, industrial societies prepare individuals for the world of work in agencies that are usually separate from the organizations that will ultimately employ them. Persons therefore may form expectations and develop needs with respect to work which may not be realizable given the range of alternatives open to them. Organizations, on the other hand, frequently design jobs to maximize efficiency as determined by technological and management principles and must rely on less than perfect information about the existing supply of labor in order to fill these positions. It thus appears likely that in industrial societies there is a high probability that the matching of the individual and the job will not result in a "fit," i.e., the attainment by the individual of a job which enables him to fulfill his needs and expectations, and which is congruent with his qualifications.

An examination of these lack of fits becomes important when one considers their consequences for both the individual and the organization. With respect to the individual, research has shown that such discrepancies are the best predictor of one's job satisfaction (Child, 1969), and may result in a lack of job involvement and negative psychological reactions such as frustration, conflict, and feelings of psychological failure (Argyris, 1957; 1964). These variables in turn have been shown to be associated with the quality of one's mental and physical health. Thus, many of the health problems of our society may be profitably attacked by increasing our attention to one of their prominent causes -- the lack of fit between the individual and his job. From the organization's point of view, such discrepancies may cause concern since they may lead to lowered effectiveness and increased costs for communication, coordination, and control, as workers adapt to their failure to obtain

satisfaction of their needs by developing informal structures--becoming apathetic, for example.

Despite the importance of these issues and despite the great interest of sociologists in social mobility which involves the movement of men among jobs, little attention has been paid by sociologists to the processes by which individuals are matched to jobs and the consequences of imperfect matching. These issues have been given greater priority in the fields of industrial psychology, business management, and economics, but research in these areas needs to be supplemented by a sociological perspective on the problem so that a systematic framework for understanding and prediction can be developed. Such a framework, supported by empirical analyses based on broad, representative samples, is needed not just for "basic" scientific reasons--e.g., to understand what people want from work and the consequences of their not being able to attain it--but for "applied" purposes as well. The U.S. government, for example, has expressed concern about the issue of worker alienation (e.g., Committee on Labor and Public Welfare, 1972). However, in order for such concern to be translated into meaningful policy recommendations which are potentially effective, it is necessary to have an empirically supported theoretical framework which makes predictions about the causes and consequences of various discrepancies between the individual and the job.

In this paper, we will attempt to develop a conceptual framework which would serve as a basis for empirical research into these problems and thus be a step toward the development of a comprehensive theory of the relationship of individuals to jobs in an industrial society. Such a framework will necessarily require insights from both psychological and sociological levels of analysis -- e.g., it must recognize that the individual has needs and

expectations with respect to work and must explain these as well as his reactions to his job in psychological terms; but it must also, on the sociological level of analysis, account for the structural factors that make these particular needs, expectations, and reactions more or less likely for particular subgroups within the society. In addition, it must recognize that in an industrial society, jobs are defined primarily by their interdependence with other jobs in a complex division of labor and have an existence independent of individuals. Jobs thus can be created and eliminated independently of who occupies them or may occupy them, and we may legitimately ask questions about the degree of "fit" between jobs and individuals. Our discussion will be limited to jobs that are performed within organizations--the predominant situation in industrial societies.

The first part of the paper will discuss characteristics of jobs and of individuals as well as some of the structural determinants of these characteristics. This will be followed by a consideration of the process by which individuals and jobs are matched, the types of discrepancies that may occur due to imperfect matching, and the consequences of these discrepancies for both the individual and the organization. The emphasis throughout will be on delineating the important factors in each phase of this process and on describing how these are interrelated. We will not attempt to exhaustively describe and analyze any particular phase of this process; such efforts will rather form the substance of future work.

Characteristics of Jobs

In order to delineate the characteristics that differentiate jobs, it will be useful to make a distinction between those factors that are associated with the fact that jobs may be classified as belonging to particular occupations

and those factors which are associated with differences among jobs within the same occupation. It is thus important to make clear the distinction between an "occupation" and a "job." An "occupation" may be defined as the "social role performed by adult members of society that directly and/or indirectly yields social and financial consequences and that constitutes a major focus in the life of an adult" (Hall, 1969:5-6). It is thus a social category, specifying a particular function within a societal division of labor. "Job" or "work role," on the other hand, refers to a specific activity performed by an individual within a particular occupation. Though some (e.g., Davis and Taylor, 1972) prefer to distinguish between "job" and "work role," we shall use them interchangeably to refer to the set of rules and expectations on the part of the employee as well as the organization that directs all of the individual's "at work" behavior. It thus includes the individual's social relations in the work situation as well as his direct activities in relation to the object undergoing transformation (cf. Davis and Taylor, 1972:11-12).

The first dimension of variation among jobs thus parallels the variation among their associated occupational categories. Occupations may be said to vary with respect to their requirements and their rewards. Requirements differ with respect to prerequisites for entry (in terms of education, training, certification), and type of tasks its incumbents generally perform (whether manipulation of symbols, people, or things), which require different types and levels of skills. There are a number of difficulties in determining these occupational requirements since they must be conceived of as complex patterns rather than in unidimensional terms. One attempt at an operationalization of the functional or performance requirements for an occupation is the General Educational Development (GED) scale developed by the Bureau of Employment

Security. This scale is an attempt to delineate the requirements for each of three fundamental skills -- reasoning, mathematics, and language -- for job titles listed in the Dictionary of Occupational Titles (U. S. Department of Labor Bureau of Employment Security, 1966). (For an extended discussion of these issues of operationalization of requirements for occupations, see Kalleberg and Sørensen, 1973:218-222.)

Rewards differ with respect to the societal evaluation of the occupation (prestige), the income associated with the occupation, the position of the occupation in the societal and organizational authority structures, and the extent to which the occupation permits the attainment of an orderly career, i.e., the progression to other occupations that provide greater rewards or progression within the stratification system of the particular occupation. These dimensions of rewards are interdependent among themselves and with the dimensions of occupational requirements, and each dimension may be used to rank occupations with respect to their desirability.

Within a particular occupational category, jobs vary on a number of additional dimensions which are to a certain extent independent of their association with an occupation. These variations are due to the fact that jobs are units in a smaller social system than that of the society, namely an organization, and thus may vary with respect to opportunities for self-direction (e.g., degree of role specificity, substantive complexity), types of social relationships (e.g., quality of interpersonal relationships), and benefits not directly associated with the occupational category (e.g., tenure, retirement benefits, fringe benefits).

Variation in jobs thus is produced by two main sets of factors -- those due to their being associated with an occupational category in an interdependent societal division of labor and those due to their being components of an

interrelated set of roles that define the organization. Characteristics of jobs that are associated with each of these two sets may in turn be ranked according to their relative desirability. While jobs that are associated with highly desirable occupational characteristics may also be associated with desirable organizational characteristics, this need not necessarily be the case (e.g., the relatively prestigious occupation of accountant may be associated with a high degree of role specificity and low substantive complexity in a particular organization). Individuals may therefore find it difficult to maximize their values with respect to all characteristics of jobs to the extent that characteristics associated with the occupation are not highly correlated with those due to the organization. Since the aspects of the job associated with the occupation have greater visibility to the community and the society, the individual will probably attempt to maximize his values with respect to these when choosing a job, rather than the aspects associated with the organization about which he is likely to have less information. This is already one reason why discrepancies between individuals and their jobs may occur.

The dimensions of variation just delineated do not occur randomly but depend on factors operating at both the societal and organizational levels. It will thus be useful to briefly indicate what these factors are since they will largely determine the availability of jobs with particular characteristics. The occupational structure of a society, that is, the distribution of occupations according to characteristics relevant for our analysis, at any point in time depends on (1) the level of technological change (Treiman, 1970); as countries industrialize, the proportion of the labor force engaged in agriculture decreases, the number of occupational specialties is greatly

increased, and the ratio of nonmanual to manual workers in the labor force increases; (2) population growth and distribution (e.g., the "baby boom" of post-World War II in the U. S. has influenced the increase in the service sector); (3) government policies with respect to expenditures (e.g., the recent increase in health-related occupations); (4) the quantity and quality of labor supply; and (5) the level and structure of consumer demand. These factors are interrelated but make distinct contributions to the growth and decline of particular occupations.

The distribution of characteristics of particular jobs within an organization is determined in part by the occupational category to which it belongs, since the occupation determines the type of task that is done and the general position of the activity in the organizational hierarchy (e.g., managers will have greater authority than clerks). Thus the opportunities for self-direction, type of social relations, etc., will differ for different occupations. Within occupational categories, however, jobs may differ on these dimensions due to factors associated with the particular organization, such as the degree of uncertainty in its environment and its technology and managerial policy. Highly role-specific jobs, for example, have been argued to be associated with routine technologies (Perrow, 1967), high degrees of organizational complexity (Child, 1973), and adherence to Tayloristic principles of management. Similarly, the quality of interpersonal relations associated with a job is affected by the leaderhsip style of the organization.

The distribution of job characteristics is thus mainly determined by such factors as the derived demand for goods and services and the technological structure as well as factors unique to particular organizations. Since these factors are largely independent of the distribution of characteristics of individuals at any given point in time, the fit of individuals and jobs becomes

problematic. Before discussing the issue of fit it will be necessary to first delineate the characteristics which differentiate individuals.

Characteristics of Individuals

Just as jobs vary, so do individuals. It will therefore be necessary to delineate the dimensions of variation among individuals before proceeding to a discussion of the interaction of individuals and jobs. In this section, we will first describe the ways in which individuals differ that are important in this context and then discuss some of the determinants of this variation.

Individuals vary along two basic dimensions: with respect to their qualifications for particular jobs and with respect to the values they have toward different aspects of work. Qualifications include the extent to which individuals are certified for particular jobs, their level, type, and degree of specialization of skill, and their noncognitive attributes. Individuals also differ in their ordering of needs and values that they bring to the work situation, called their "reward value hierarchy" (Blau et al., 1956), their "projets" (Touraine, 1971), or their "orientation to work" (Goldthorpe et al., 1968). These values relate both to the rewards associated with the occupational category and those associated with the organizational features of the job (in fact, these values determine which employment conditions constitute rewards for a particular individual). Thus, individuals differ in the value they place upon prestige, income and fringe benefits, authority and power, careers, self-direction and interpersonal relationships. Qualifications and values are not independent, since qualifications reflect training and experiences that are of importance for the values individuals form.

The first component of one's qualifications, certification, is assessed by the extent to which he meets the requirements set by the occupation (e.g.,

via a professional association) to practice a particular job activity and/or the hiring requirements set by the organization. The form such certification takes will vary, though common forms include a period of apprenticeship or an educational credential. Although such indices of certification may be expected to be indicators of one's possession of the skills required for particular jobs, this need not necessarily be the case and instead they may be used by employers as indicators that one has been "properly" socialized for the job (Gintis, 1971) or as a screening mechanism to lower hiring costs (Berg, 1970).

In general, skills refer to those motoric aptitudes and knowledge that are relevant for carrying out a task embodied in a job. They can be differentiated according to their level, type, and degree of specialization. Level of skills may be operationalized by the costs of training an average person; type of skills may be classified according to the activities for which they are used and operationalized by the characteristics of occupational activities given in the Dictionary of Occupational Titles. Finally, skills are specialized to the extent that they are not transferable to other tasks than the ones they were acquired to carry out. Specialization may be operationalized by the costs of retraining that person for another task (controlling of course for similarity between tasks). Skills are mostly acquired in schools and on-the-job, although some general skills are also acquired in the family. (For an extended discussion of skills, see Sørensen and Kalleberg, 1974.)

The final component of qualifications, one's noncognitive attributes, represents his social characteristics other than technical qualifications which influence hiring decisions, such as skin color, and personality characteristics, such as discipline and subordinancy (see Gintis, 1971). These attributes

are products of one's educational experience, personality development, birth, etc.

The values that an individual has with respect to characteristics of jobs are related to his qualifications since his attainment of the latter (e.g., credentials) may be motivated by his values and vice versa. Some of the variance in these values and needs may be explained by reference to personality characteristics unique to the individual (e.g., authoritarianism, extroversion-introversion, independence needs), but these are not the concern of this paper. Rather, we are concerned with variation in such values that are more directly socially determined, i.e., we are primarily concerned with factors that produce differences between, rather than within, social groupings (cf. Friedlander, 1965).

Variation in the ordering of values with respect to work is first affected by family background as determined by social class position. Parents of different social classes, perhaps reflecting their experiences in the world of work, differentially value various characteristics of jobs and teach these values to their children. Kohn (1969) and Kohn and Schooler (1969), for example, found that in both the U. S. and Italy, higher-class parents place a greater value on self-direction while lower-class parents place a greater emphasis on conformity to authority. Hyman (1966) found that lower-class parents tended to emphasize stability and security as rewards more than higher-class parents, who placed greater stress on intrinsic rewards. In line with these values with respect to work, differential emphasis is placed on education, the primary mechanism facilitating the attainment of occupational status in the U. S. (Blau and Duncan, 1967). Parental encouragement has been shown to be a powerful intervening variable between SES and intelligence and one's educational aspirations (Sewell and Shah, 1968), and lower class parents place less value

on higher education than their higher-class counterparts (Hyman, 1966). Thus, the family produces variation in values in at least two ways -- via its direct socializing influence with respect to organizational and occupational characteristics (including occupational inheritance) and via its effect on the child's educational aspirations.

The second major factor producing differences in these values among social groups is education, which in industrial society has become the principal mechanism for selecting individuals to play roles in the occupational system and the chief socializing agency for the child from elementary school to his entry into the labor force (Parsons, 1959; Cohen and Lazerson, 1972). Schools select those who will go to college and those who won't, and "losers" accept the differentiation occurring in the educational system and later in the occupational system because of the common value in our society on achievement, and because selection was presumably made on the basis of universalistic criteria (Parsons, 1959). Those who do not have the ability to go to college may be "cooled out" (Clark, 1970) and be socialized into lower occupational aspirations. (Thus, values with respect to work both affect and are affected by, qualifications.) The educational system produces both cognitive (Kohn, 1969) and noncognitive (Gintis, 1971) skills and attributes as well as affects one's reward value hierarchy with respect to work -- e.g., it has an effect on desire for self-direction which is independent of the effects of occupational position (Kohn, 1969; Kohn and Schooler, 1969).

A number of other factors have been cited as important in their effects on values toward work. Sex role socialization differences, for example, produce differences between men and women regarding societal definitions of the work role (Rossi, 1969). Centers and Bugental (1966) found that women place greater emphasis on social factors such as "good co-workers" than do men, who

are more likely than women to stress such intrinsic factors as "work which allows you to use your skill and talent." Other factors include one's position in the life cycle; domestic circumstances such as whether married and number of dependent children (Goldthorpe et al. [1968] found that married workers with children were motivated to give higher priority to extrinsic, economic returns than those without children); and experience of geographical and/or social mobility (Goldthorpe et al. [1968] found geographical and downward social mobility to be associated with a valuation of extrinsic, especially economic rewards from work).

Differences in work orientations which are held upon entry into the labor force will be modified by actual work experience, which may be the most important factor of all in shaping the orientations of the mature worker. Kohn (1969) and Kohn and Schooler (1969), for example, found that men in higher occupational positions judge jobs more by their intrinsic qualities (interesting work, chance for self-direction, chance to use one's abilities) than those in lower occupational positions, who tended to emphasize extrinsic rewards (pay, fringe benefits, type of supervisor, co-workers) to a greater extent. (These effects were independent of, and greater than, the effects of education.) Thus, men judge jobs both in terms of what they might ideally want and in terms of the alternatives that are realistically open to them. This finding, supported by Friedlander (1965, 1966) and Centers and Bugental (1966), strengthens the hypothesis that workers tend to be aware of and adapt to reality and will seek out those satisfactions that are possible even though they may prefer others (see also Argyris, 1973; Goldthorpe et al., 1968).

The values and orientations of individuals are organized into hierarchies of occupational aspirations and expectations. The hierarchy of occupational

aspirations is formed by the individual's values with respect to work as well as by family experiences, educational experiences, sex role socialization, work experiences (Sewell, Haller, and Strauss, 1957). These aspirations may be unrealistic, however, as shown by Reiss (1961). The individual also has a hierarchy of expectations based on his appraisal of obtaining the types of work that he aspires to and values. These are more realistically grounded than aspirations and based more directly on the individual's qualifications, work experience, and his perception of the supply of, and demand for, workers with his qualifications. A key factor which may be expected to make one's expectations conform closely to his aspirations in the U. S. is education. Due to the emphasis placed in our society on individual achievement and on education as the avenue to social mobility, it has been argued that the educational credential has come to be regarded in terms of its marketability (Mills, 1951), i.e., as an investment in one's future that should provide rewards (those aspects of work that one values) in the occupational system.[1]

The characteristics of individuals just described cannot be expected to match the characteristics of jobs that are available at any given point in time in an industrial society. An important part of the training for jobs in industrial societies takes place in schools only loosely connected with the labor market and even the training acquired in jobs does not ensure the availability of actual jobs. Similarly, values and expectations regarding jobs and the rewards derived from them are formed on the basis of predictions based on less-than-perfect information regarding job opportunities. Thus, there exists a great potential for discrepancies between the values and qualifications of the individual and the complementary characteristics of jobs in an industrial society. We shall consider these discrepancies after we consider the process by which individuals and jobs are matched.

The Matching Process

Having discussed the dimensions along which jobs and individuals vary, we shall in this section consider the process by which individuals and jobs are matched. This process is conceived of as an exchange situation wherein each party attempts to satisfy his objectives as best he can. Individuals will attempt to choose a job that will satisfy their values toward work and which will be appropriate to their qualifications. Organizations, on the other hand, will attempt to select individuals that will have the requirements for filling its job vacancies--both functional requirements (technical requirements needed to optimally perform the job) and nonfunctional requirements (criteria of selection not related to actual performance -- e.g., sex, race).

The interaction of the processes of individual choice and organizational selection results in the matching of the individual to the job. The key factor in this exchange is the relative power of the parties, for the relative power will determine the outcome of the process and thus the potential for a discrepancy between the individual and the job. Thus, a consideration of the nature and causes of the relative power of the parties in the matching process should enable us to make predictions as to the occurrence of various types of discrepancies.

The concept of power as used here is similar to that used by Crozier (1973). That is, A's power over B corresponds to A's capacity to impose on B terms of exchange that are favorable to A. If we make the assumption that individuals will not seek jobs that will result in discrepancies with their values and/or qualifications, we may equate the relative power of the individual with respect to the organization with the degree of control persons have over their employment situation. Thus, if individuals have a high degree of control

over their employment situation, they will have relatively great power vis-à-vis the organization, and vice versa. The implication of this is that discrepancies between the values of the individual and the extent to which these are realizeable on the job will occur when persons have relatively low degrees of control over their employment situation. Discrepancies involving the qualifications of individuals and the requirements of jobs include a number of different types and thus the situation here is more complicated. (For a discussion of this matching of the qualifications of individuals to the requirements of jobs, see the extended treatment in Sørensen and Kalleberg, 1974.)

The degree of control individuals have over their employment situation is composed of two components: (1) the degree to which persons can choose between alternative employment opportunities when seeking a job, and (2) the degree to which they can decide themselves when to leave a job, or their job security. The two components will often vary together. The remainder of this section will attempt to indicate some of the more important determinants of these components of a worker's degree of control. (The reader is referred to Sørensen and Kalleberg [1974] for a more extended treatment of this topic.)

The range of occupations from which the individual has the alternative of choosing is limited by restrictions on information. For example, there may be a lack of knowledge regarding all the occupations which would be suitable and for which one would be qualified (including knowledge of requirements for entry, rewards offered, opportunities for employment and advancement) and the costs of obtaining this information may be too high. Such information in turn is not randomly distributed in the population but differs according to education, sex, family class position, etc. (Reiss, 1961), thus giving certain

groups of people greater control over their employment situation than others. Information restrictions also affect control in another way, that is, since organizations are limited in their selection by lack of complete information regarding personnel, they often use educational credentials to "screen" possible applicants to offset the hiring costs involved in developing tests to ascertain this information (Taubman and Wales, 1973). Thus organizational information restrictions make a lack of appropriate qualifications an important factor producing a lack of control. (Whether or not this use of credentials is a rational procedure on the part of organizations is another question; Berg [1970] suggests that it may not be.)

Even if one has perfect information, however, an individual may not be able to obtain certain jobs if his mobility for some reason is constrained. The cost of moving to another geographical area is one such constraint. Married women are often constrained by the employment of their husbands. Discrimination whether against certain races, ethnic groups or other minorities can be seen as barriers to mobility that reduces a person's possibility of taking advantage of existing employment opportunities. Whether barriers are caused by personal attributes such as marital status and geographic location, or by structural forces such as discrimination, they reduce a person's control over his employment situation.

Characteristics of the labor market will also influence one's control. High employment levels, for example, will increase the power of the individual vis-à-vis the organization since more jobs will be available for persons seeking jobs, and job incumbents have more control over the decision to leave. In addition, the structure of the labor market itself has an effect. An individual has a greater probability of satisfying his desire for high income in structured labor markets where wages are set by union-management contract than in an

unstructured labor market of individual bargaining.

Finally, one's range of alternatives is limited by his previous decisions in the labor force. "Occupational tracking" (Jakubauskas and Palomba, 1973) may be expected to be increasingly common due to the greater stress on credentials, making it difficult for persons to switch careers without incurring the high costs associated with returning to school.

The variables that influence the matching process in the ways described above, such as information, geographical constraints, and employment levels, are variables that will be responsible for the frequency of discrepancies between jobs and men, given a distribution of jobs and a distribution of individuals. They will thus be important variables in an analysis attempting to account for variation in the amount of job satisfaction among population groups or change over time in worker attitudes and/or organizational effectiveness.

Discrepancies Resulting from Imperfect Matching

Having described the general process by which a discrepancy between the individual and the job occurs, we shall in this section delineate the various types of discrepancies that may occur. We shall describe two basic types of discrepancies -- those between the individual's skills and those required to adequately perform the job and those arising from the individual not being able to attain those aspects of work which he values.

The general cause of a discrepancy between the individual's skills and those required to adequately perform the job is a lack of information on the part of the individual and/or the organization. The individual has a lack of information regarding the amount of skill required to perform the job so he must rely on such "objective" indicators as the credential required for entry, which may not be highly correlated with required skill if the job has been educationally upgraded (Berg, 1970; Scoville, 1966). The organization, on

the other hand, has a complementary lack of information with respect to the skills possessed by the individual and thus relies on such "objective" indicators as the individual's credentials, which may also not be highly correlated with his ability to perform the job.

There are two basic types of skill discrepancies. The first, quality underemployment (also called "overtraining" [Kalleberg and Sørensen, 1973] or "underutilization"), occurs when an individual is employed at a job which does not require the full use of his skill or occupational capacity (Jakubauskas and Palomba, 1973). An extreme example of this type would be a medical doctor employed as an orderly in a hospital, but it has been suggested that this situation is prevalent in lesser degrees throughout the work force (Mills, 1951; HEW, 1973). In addition to the general cause of lack of information, this type of discrepancy results from the organization having greater power than the individual in the job entry situation due to an oversupply of qualified manpower. This situation is especially problematic in developing countries where there is great demand for the expansion of the educational system as an avenue to occupational attainment and where this expansion is not accompanied by an expansion of the economy to be able to absorb such highly trained labor (Myint, 1965; Treiman, 1970).

A second type of skill discrepancy may be termed "undertraining" and occurs when an individual is employed at a job for which he doesn't have the necessary skill or occupational capacity. This situation, if not caused by lack of information, reflects the greater power of the individual in the bargaining situation if it occurs initially, since the organization has been forced to greatly compromise its level of acceptable requirements. This situation may also occur when there are rapid shifts in the organization of work or the technology for which the worker is not prepared (e.g.,

obsolescence of skills).

The second major category of discrepancies occurs when the individual is unable to attain those aspects of work which he values. Within this category there are at least four subtypes which are interdependent, since one may value several correlated aspects of work and may simultaneously fail to attain them.[2]

The first is the failure to obtain valued opportunities for self-direction (i.e , the failure to obtain intrinsic rewards). This may be due largely to a lack of information on the part of the individual, i.e., he can choose particular occupational categories that he expects will offer self-direction (e.g. [More and Kohn, 1960] dentistry), but within occupational categories these opportunities may vary widely depending on how the particular job is structured and defined by the organization. Even given perfect information, however, this discrepancy may still occur since such opportunities are determined by the way the organization structures its tasks and thus within particular occupational categories the individual may have no opportunities for the satisfaction of such values. It has been argued that such discrepancies are prevalent among young, blue-collar workers (Sheppard and Herrick, 1972) and also occur when the professional's desire and need for autonomy clashes with the organization's requirements for coordination (Kornhauser, 1963).

A second type occurs when the individual values a career (Goldthorpe et al.'s "bureaucratic orientation") but fails to obtain it. The individual with a bureaucratic orientation may choose particular occupations that he believes will facilitate a career, but within occupations a number of factors operate to produce variation in the degree to which a present job will lead to other, more valued jobs. These include: the organization's rate of growth and turnover rate (discrepancies are more likely if these are low), and whether

promotion policies are ambiguous and whether or not they are based on merit.

A third type occurs when the individual fails to obtain valued social relationships. This again may be due to a lack of information on the part of the individual since he may choose particular occupations that he thinks may provide such opportunities but these are largely determined by the organizational setting in which the job occurs. For example, Form (1972) has shown that opportunities for worker integration are constrained by the degree of control workers have over their machines and by the density of the workplace.

The final type involves failures to obtain desired income, prestige, or authority from one's occupation. These discrepancies are examples of inconsistent statuses insofar as differing expectations result from one's positions on these hierarchies and on nonoccupational hierarchies such as education; and are produced not so much by a lack of information (since these are attributes of an occupation which are visible to the society in general), but by the relationship between the supply of, and demand for, workers with particular qualifications and on the structure of the labor market (Caplow, 1954).

Individual Consequences of Discrepancies

Having taken a job which involves one or more of these discrepancies,[3] it is hypothesized that the individual will initially experience negative psychological reactions, which will motivate him to attempt to eliminate the discrepancy by individual means. If such efforts are unsuccessful, it is predicted that the negative reactions will intensify and various adaptations will occur. In this section, each of these phases will be discussed in detail.

The initial experience of a discrepancy is hypothesized to result in the individual experiencing negative psychological reactions. The processes

involved are not quite the same for all the types of discrepancies that we outlined in the last section, however, and thus it will be useful to briefly discuss each type in turn.

With respect to the skill malfits, the first (underemployment), will not per se generate negative responses; for it to do so, the individual must value the utilization of these skills. Thus, the reactions to this discrepancy will appear as a component of the intrinsic discrepancies. The second type of skill malfit, undertraining, is a transient state which is not likely to persist since it is assumed that it is in the interests of the organization to provide the worker with the training which is necessary for him to adequately perform his job. (See Sørensen and Kalleberg [1974] for an extended discussion of discrepancies involving skills.)

In the case of intrinsic discrepancies, the worker doesn't obtain his desired opportunities for self-direction which includes a lack of opportunity to use his skills and abilities. This type most closely resembles the incongruency between the individual and the organization described by Argyris (1957; 1964) and its predicted consequences for the individual include frustration, conflict, and feelings of psychological failure. Similarly, these reactions are also hypothesized in the case of discrepancies with respect to careers and social relationships, these too being incongruencies between the needs of the individual and the demands of the job.

The final types of discrepancies, those involving income, authority, and prestige, are also hypothesized to produce these reactions though in these cases two additional mechanisms may be expected to be operative. First, there may be a "status inconsistency" effect to the extent that the individual is faced with differing expectations with respect to past achievement (e.g., in education) and those associated with his present occupation. Second, the

individual may consider himself to be in an inequitable situation insofar as his expectations for income and status are based on what he considers rewards for his investments in education or training.

Given that the individual experiences negative psychological reactions as a function of one or more of these discrepancies, it is hypothesized that he will attempt to eliminate the discrepancy by individual means and thus presumably eliminate the resulting frustration, conflict, or feeling of psychological failure. There are two major mechanisms by which he may do this. He can leave the discrepant situation or eliminate the discrepancy by modifying his orientation toward work. We shall discuss each of these in turn.

The first mechanism, quitting the job, is the most extreme form of conflict reduction and will be utilized only as a last resort since it is likely to involve sizeable costs to the individual (Pondy, 1967). These include costs of dislocation to himself and his family (Argyris, 1964) and the individual is likely to be highly doubtful that the probability of his finding a more suitable job will be great since the particular supply and demand employment situation and lack of information which produced the discrepancy initially may still exist.

The second, more probable mechanism for eliminating the discrepancy is to adapt to the present job by changing or modifying one's orientation to work to conform to what is presently available. Here we hypothesize that the work orientations are not independent but form a hierarchy and that individuals may begin to value most highly those aspects of work in their hierarchy that are available to them. Thus, workers who initially valued primarily intrinsic aspects of work may see their work primarily as a source of income (see Argyris, 1972), or they may develop a career orientation and see their present job primarily in terms of a stepping-stone to better jobs, etc. There are a

number of constraints on the extent to which one can substitute such orientations, however, such as the strength with which one initially held an orientation and the extent to which the various aspects of work which one values are positively correlated. If one's values are institutionally supported, for example, as the professional's valuation of autonomy is supported by a professional association with its norms, codes of ethics, circles of colleagueship, etc., he would be less likely to opt for a primarily extrinsic view of work than if he did not have such a reference group.

In the event that the individual is unable to eliminate the discrepancy(ies) by one of these methods, it is hypothesized that the initial negative psychological reactions will intensify. He will have low job satisfaction and will adapt in various ways in order to cope with the situation.

The worker may adapt individually via apathy and noninvolvement in work and may decrease his expectations (and perhaps even his aspirations) that his needs will be fulfilled via work. He may also become aggressive, hostile, and attack the sources of his frustration (Argyris, 1957).

The worker may also seek group support to guarantee the existence of these adaptive mechanisms, thus creating informal groups within the organization which may engage in activities that are antithetical to the interests of the organization (e.g., group slowdowns, quota restrictions) (Argyris, 1957; 1964). These informal groups in turn may be perpetuated by becoming formalized. Such formal groups (e.g., unions, occupational associations) may be viewed as institutionalized means of guaranteeing the existence of informal adaptations as well as means by which collectivities of individuals seek to strengthen their position with respect to the organization in order to decrease their discrepancies. (The needs and motives of individuals may thus become an

internal force for organizational change [Katz and Kahn, 1966].)

The issues that these formal groups are involved with presumably reflect the concerns of their membership. Unions, for example, attempt primarily to decrease discrepancies with respect to income, careers (attempt to make promotions based on seniority, etc.) and such working conditions as the quality of social relationships. These concerns may reflect the work values of their members and the belief that these issues are the ones which the unions are most able to affect. Occupational associations, notably professional associations such as the AMA and ABA, on the other hand, while concerned with income and careers are also interested in such content of work issues as autonomy and control over work (see Kornhauser, 1963), which may be a reflection of the greater priority placed on these factors by higher status workers as well as their need for these to effectively perform their work. The extent to which such collective actions are likely to be effective in decreasing these discrepancies will be a function of the formal group's financial resources, political strength, and control over the supply of labor (Yale Law Journal, 1966), as well as the centrality of the occupation's skills to the organization's functioning and the prestige of the occupational group (Scott, 1966).

Consequences for the Organization

The adaptations and reactions of individuals to these discrepancies (e.g., informal activities, job dissatisfaction, absenteeism, turnover, lack of involvement) will have consequences for the organization and may lead to its reacting in such a way as to increase or decrease the problem. In this section, we will briefly outline some of these consequences and some possible reactions.

Argyris (1964) argues that the informal activities and the experiences of psychological failure which accompany discrepancies reduce the amount of

psychological energy available to the organization and thereby reduces its effectiveness.[4] That such an incomplete utilization of human resources is a reflection of low organizational effectiveness has also been argued by Katz and Kahn (1966) and Yuchtman and Seashore (1967). Lawrence and Lorsch (1968), moreover, suggest that a reason for the low performance of an organization is the lack of fit between managers and the structure of the organization. Other consequences for the organization include: pressures to displace goals (Etzioni, 1964); greater costs due to increased need for control and coordination (Etzioni, 1964); increased problems of communication (Argyris, 1964); and in general, the inhibiting of the productivity, stability, and adaptability of the organization (Pondy, 1967).

The reactions of the organization will be directed toward alleviating these consequences; but whether these reactions will aggravate or alleviate the problem will depend on whether the organization correctly perceives the cause of the problem and whether the measures it takes to resolve it are appropriate. In the case of a discrepancy involving self-direction, for example, Argyris (1957, 1964) has argued that the problem for both the individual and the organization will be increased if management perceives the difficulty as due to inappropriate employee attitudes and reacts by authoritarian and directive leadership, tighter controls, making working conditions more pleasant, etc. Similarly, if the discrepancy involves primarily insufficient income, methods such as job enlargement will not be appropriate. On the other hand, organizations may correctly diagnose the problem and may react in such a way as to decrease the discrepancy and increase its effectiveness. For example, Blau (1968) suggests that a decentralization of authority and responsibility may occur in response to an increase in the expertness of the staff; and Hall (1972) suggests that a decrease in formalization may accompany an increase in

the professionalization of workers.

Summary and Conclusion

The matching of individuals to jobs in an industrial society is a problematic process which has a high potential for conflict. In this paper we have attempted to develop a conceptual framework which would help to identify the key variables in this process and thus serve as a source of hypotheses for empirical research into these problems.

It was argued that variation among jobs is attributable to two main sources -- variation due to their being associated with different occupational categories and variation within occupational categories produced by differences in organizational settings. Individuals also vary in their qualifications and in their orientations toward work.

It has been stressed that in an industrial society, jobs vary independently of the characteristics of individuals and therefore considerations of the degree of "fit" between them become both relevant and important.

Individuals and jobs are joined in a matching process wherein each party attempts to satisfy his objectives -- the individual attempts to find a job which has characteristics that are congruent with his values toward work, and the organization attempts to find a worker with maximum productivity. The extent to which each party is able to achieve its objectives is dependent upon its relative power in this exchange, and to the extent that the resulting bargain is not mutually satisfactory the potential for a discrepancy exists.

Two major types of discrepancies resulting from imperfect matching were delineated. First, discrepancies between the individual's skills and those required to adequately perform the job -- overtraining and undertraining.

Second, discrepancies due to the failure of the individual to obtain valued aspects of work -- intrinsic rewards, careers, social relationships, and income, prestige and authority.

The individual's experience of these discrepancies will result in initial attempts to eliminate them, by leaving or by changing his orientation toward work. If these fail, it is predicted that negative job attitudes, informal activities and collective action may ensue. These adaptations are also likely to lower the effectiveness of the organization.

Having identified some of the variables that are involved in the matching of individuals and jobs and having described how these variables are interrelated, the next step required is empirical research to strengthen these arguments and to form the basis for a theory of the relationship of the individual to the job in an industrial society. The concern with these issues seems highly appropriate in view of the renewed interest of sociologists in the quality of workers' employment experience.

NOTES

1. The Human Capital approach in economics, for example, treats education as an investment one makes to increase his capability as a producer and computes rates of return (in the form of income) on this investment. Similarly, education can be conceived of as an investment one makes to obtain any aspect of work which he values. Both of these conceptions assume a rational actor, who will not invest unless he expects some return on his investment.

2. Rather than a conception of a worker valuing one of several aspects of the job and thus having one type of discrepancy should he fail to obtain it, a more correct view would be to recognize that each worker values all aspects of the job in varying degrees and thus may have varying degrees of discrepancy with respect to all of these aspects. This consideration becomes especially important when attempting to empirically investigate the consequences of discrepancies, but is a subtlety that will not be explored further in this paper. Instead, when we speak of a worker having "a" discrepancy, this should be taken to mean the greatest discrepancy or his failure to obtain his most valued aspect of the job.

3. The arguments advanced thus far in this paper refer mainly to discrepancies that occur initially when the individual and the job are matched. It should be recognized that other processes may produce such discrepancies, however. There can be a process of socialization at work, for example, which could lead from a nondiscrepant match at job entry to a discrepant one after a number of years and no promotion. The discussion in this paper from this point on assumes that a discrepancy has occurred and is applicable regardless of whether the discrepancy occurred initially or over time.

4. Argyris defines effectiveness as achieving the core activities of the organization (i.e., achieving its objectives, maintaining the internal system, adapting to the external environment) at a constant or increasing level with the same or decreasing increments of inputs of energy.

References

Argyris, Chris

1957 Personality and Organization. New York: Harper Brothers.

1964 Integrating the Individual and the Organization. New York: Wiley and Sons.

1972 The Applicability of Organizational Sociology. Cambridge: Cambridge University Press.

1973 "Personality and organization theory revisited." Administrative Science Quarterly 18(June):141-167.

Berg, Ivar

1970 Education and Jobs: The Great Training Robbery. New York: Praeger.

Blau, Peter M.

1968 "The hierarchy of authority in organizations." American Journal of Sociology 73(January):553-567.

Blau, Peter M. and Otis Dudley Duncan

1967 The American Occupational Structure. New York: Wiley and Sons.

Blau, Peter M. and John W. Gustad, Richard Jessor, Herbert S. Parnes, Richard C. Wilcock

1956 "Occupational choice: a conceptual framework." Industrial and Labor Relations Review 9(July):531-543.

Caplow, Theodore

1954 The Sociology of Work. Minneapolis: The University of Minnesota Press.

Centers, Richard and Daphne E. Bugental

1966 "Intrinsic and extrinsic job motivations among different segments of the working population." Journal of Applied Psychology 50(June):193-19

Child, John

1969 The Business Enterprise in Modern Industrial Society. London: Collier-MacMillan Limited.

1973 "Predicting and understanding organization structure." Administrative Science Quarterly 18(June):168-185.

Clark, Burton R.

1970 "The 'cooling-out' function in higher education." Pp. 236-245 in Neil J. Smelser and William T. Smelser (eds.), Personality and Social Systems. New York: Wiley and Sons.

Cohen, David K. and Marvin Lazerson

1972 "Education and the corporate order." Socialist Revolution 8 (March/April):47-72.

Committee on Labor and Public Welfare

1972 Hearings on Worker Alienation. Washington, D.C.: U. S. Government Printing Office.

Crozier, Michel

1973 The Stalled Society. New York: The Viking Press.

Davis, Louis E. and James C. Taylor (eds.)

1972 Design of Jobs. Middlesex: Penguin Books Limited.

Etzioni, Amitai

1964 Modern Organizations. New Jersey: Prentice-Hall.

Form, William H.

1972 "Technology and social behavior of workers in four countries: a sociotechnical perspective." American Sociological Review 37 (December):727-738.

Friedlander, Frank

1965 "Comparative work value systems." Personnel Psychology 18(Spring):1-20.

1966 "Importance of work vs. nonwork among socially and occupationally stratified groups." Journal of Applied Psychology 50(December): 437-441.

Gintis, Herbert

1971 "Education, technology and the characteristics of worker productivity." American Economic Review 61(May):266-279.

Goldthorpe, John H. and David Lockwood, Frank Bechhofer, Jennifer Platt

1968 The Affluent Worker: Industrial Attitudes and Behaviour. Cambridge: Cambridge University Press.

Hall, Richard H.

1969 Occupations and the Social Structure. New Jersey: Prentice-Hall.

1972 Organizations: Structure and Process. New Jersey: Prentice-Hall.

Hyman, Herbert H.

1966 "The value systems of different classes." Pp. 488-500 in Reinhard Bendix and Seymour Martin Lipset (eds.), Class, Status and Power. New York: The Free Press.

Jakubauskas, Edward B. and Neil A. Palomba

1973 Manpower Economics. Reading, Mass.: Addison-Wesley.

Kalleberg, Arne L. and Aage B. Sørensen

1973 "The measurement of the effects of overtraining on job attitudes." Sociological Methods and Research 2(November):215-238.

Katz, Daniel and Robert L. Kahn

1966 The Social Psychology of Organizations. New York: Wiley and Sons.

Kohn, Melvin L.

1969 Class and Conformity. Homewood, Illinois: The Dorsey Press.

Kohn, Melvin L. and Carmi Schooler

1969 "Class, occupation and orientation." American Sociological Review 34(October):659-678.

Kornhauser, William

1963 Scientists in Industry. Berkeley: University of California Press.

Lawrence, Paul R. and Jay W. Lorsch

1967 Organization and Environment. Boston: Harvard University Press.

Mills, C. Wright

1951 White Collar. New York: Oxford University Press.

More [illegible]. M. and Nathan Kohn, Jr.

1960 "Some motives for entering dentistry." American Journal of Sociology 66(July):48-53.

Myint, H.

1965 "Education and economic development." Social and Economic Studies 14(March):8-20.

Parsons, Talcott

1959 "The school class as a social system: some of its functions in American society." Harvard Educational Review 29(Fall):297-318.

Perrow, Charles

1967 "A framework for the comparative analysis of organizations." American Sociological Review 32:94-208.

Pondy, Louis R.

1967 "Organizational conflict: concepts and models." Administrative Science Quarterly 12(September):296-320.

Reiss, Albert J., Jr.

1961 Occupations and Social Status. New York: The Free Press of Glencoe.

Report of a Special Task Force to the Secretary of Health, Education and Welfare

1973 Work in America. Cambridge, Mass.: The M. I. T. Press.

Rossi, Alice

1969 "Women in science. Why so few?" Pp. 470-488 in B. C. Rosen, H. J. Crockett and C. Z. Nunn (eds.), Achievement in American Society. Cambridge, Mass.: Schenkman.

Scott, W. Richard

1966 "Professionals in bureaucracies -- areas of conflict." Pp. 265-275 in Howard M. Vollmer and Donald L. Mills (eds.), Professionalization. New Jersey: Prentice-Hall.

Scoville, James G.

1966 "Education and training requirements for occupations." The Review of Economics and Statistics 48(November):387-394.

Sewell, William H. and Archibald O. Haller, Murray A. Straus

1957 "Social status and educational and occupational aspirations." American Sociological Review 22(February):67-73.

Sewell, William H. and Vimal P. Shah

1968 "Social class, parental encouragement, and educational aspirations." American Journal of Sociology 73(March):559-572.

Sheppard, Harold L. and Neal Q. Herrick

1972 Where Have All the Robots Gone? New York: The Free Press.

Sørensen, Aage B. and Arne L. Kalleberg

1974 "Jobs, training and attitudes of workers." Institute for Research on Poverty Discussion Paper No. 204-74(June). University of Wisconsin-Madison.

Taubman, Paul J. and Terence J. Wales

1973 "Higher education, mental ability and screening." Journal of Political Economy 81(January/February):28-55.

Touraine, Alain

1971 The Post-Industrial Society. New York: Random House.

Treiman, Donald J.

1970 "Industrialization and social stratification." Sociological Inquiry 40(Spring):207-234.

U. S. Department of Labor, Bureau of Employment Security

1966 Dictionary of Occupational Titles. Washington, D. C.: U. S. Government Printing Office.

Yale Law Journal

1966 "The political basis of power." Pp. 321-325 in Howard M. Vollmer and Donald L. Mills (eds.), Professionalization. New Jersey: Prentice-Hall.

Yuchtman, Ephraim and Stanley E. Seashore

1967 "A system resource approach to organizational effectivenss." American Sociological Review 32(December):891-903.